

Work Order ID 60634

Thursday, July 15, 2010 10:31:02 AM



Page 1

Item ID: D3562-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Step Assembly, LH

Start Date: 7/15/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 7/22/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

RP

Date:

10-7-15

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3562

Rev E

100

0.00



Large Fab

Large Fab

Memo

0.00

10-08-04

2

Large Fab

1-Cut D2622 extrusion as per Dwg D3562
2-Debur and bevel ends for welding

110

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

8/10/08/05

42

Quality Control

120

0.00



Chemical Conversion Coat per QSI005 4.1

HandFinish

Memo

0.00

10-08-05

2

Hand Finishing

W/O:		WORK ORDER CHANGES					
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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

SAD
10-08-26

2

P

140

Small Fab

0.00



Small Fab

Memo

0.00

Small Fab

1- Transfer drill Rivet holes as per dwg D3562.
2-Touch-up rivet holes with alodine as per dwg d3562
3-Rivet legs using Magnabond as per dwg D3562.
*****Ensure to wipe off any excess magnobond *****
A/R Magnabond 6398 Batch: M114158

P 10.08.30

2

P

150

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

S 10/08/30

F2
LH

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 Large Fab	Large Fab	0.00							
	Memo	0.00							
	1-Weld end caps as per Dwg d3562 & QSI 004. Inspect for foreign objects as per QSI 024. A/RAluminum Rod <u>M112860</u> 2-Grind end cap welds flush as per Dwg D3562								
170 QC	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
	Memo	0.00							
	Quality Control								
180 QC	QC5- Inspect part completeness to step on W/O	0.00							
	Memo	0.00							
	Quality Control								

110.08.30

2



**2*



BE10/08/30

8/10/08/30



W/O:		WORK ORDER CHANGES					
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Required Date:	7/22/2010	Req'd Qty:	2.00		Customer:	
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				<u>M</u>	<u>10</u>	<u>08</u>	<u>31</u> (2)
200  Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <u>M114841</u> Memo START TIME: <u>1:30</u> OVEN TEMPERATURE: <u>325°</u> FINISH TIME: <u>2:00</u>	0.00 0.00							<u>2</u> <u>BK</u> <u>10-8-31</u>
210  HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch <u>115028</u> Memo	0.00 0.00				<u>M</u>	<u>10</u>	<u>09</u>	<u>01</u> (2)

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Item Name:	Step Assembly, LH					
Start Date:	7/15/2010	Start Qty:	2.00	Cust Item ID:		
Required Date:	7/22/2010	Req'd Qty:	2.00	Customer:		
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00							
<div style="display: flex; justify-content: space-between;"> <div> <p>10/09/01 61</p> <p>2.64</p> </div> <div> <p>7/21</p> </div> </div>									
230 Packaging Packaging	<p>ID + STOCK</p> <p>Pick Kit</p> <p>6-A</p> <p>W/O 60638</p> <p>EP 10/09/01 (2)</p> <p>Memo</p>	0.00 0.00							
240 QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							

10/09/02

mf

10-9-01

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

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Page 1

Work Order ID: 60634

Parent Item: D3562-041

Parent Item Name: Step Assembly, LH



Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A New Issue 06-11-09 JLM
 IPP rev B ECN 987 07.10.09 EC verified by: DD
 IPP Rev:C ECN1048 07-12-18 DD verified by:ec
 IPP Rev:D 08-07-28 add chemical conversion coat DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2622-120C Step Extrusion		Manufactured	No			100	Each	120.9200	1	2			
<div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div> <div> <div>WA</div> <div>120.92</div> <div></div> </div> <div> <div>55214</div> <div>3.92</div> <div></div> </div> <div> <div>58544</div> <div>117</div> <div></div> </div>													
D2734 Step End Plate		Manufactured	No			140	Each	15.0000	2	4			
<div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div> <div> <div>WA</div> <div>15</div> <div></div> </div> <div> <div>55014</div> <div>15</div> <div></div> </div>													
D3560-041 Arm Weldment		Manufactured	No			140	Each	8.0000	1	2			
<div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div> <div> <div>WA</div> <div>8</div> <div></div> </div> <div> <div>48385</div> <div>8</div> <div></div> </div>													
D3560-043 Arm Weldment		Manufactured	No			140	Each	7.0000	1	2			
<div> <div>Location</div> <div>Loc Qty</div> <div>Loc Code</div> </div> <div> <div>WA</div> <div>7</div> <div></div> </div> <div> <div>48387</div> <div>7</div> <div></div> </div>													

10-08-04

10-08-30

10-08-27

10-08-27

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

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Work Order ID: 60634



Parent Item: D3562-041



Parent Item Name: Step Assembly, LH

Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 2.00

Required Qty: 2.00

MS20600-AD4W5

Purchased

No

160

Each

728.0000

32

64



10.08.21

Blind Rivet

Location

Loc Qty

Loc Code

ST321

728

111477

428

114382

300

64

Thursday, July 15, 2010 10:31:06 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
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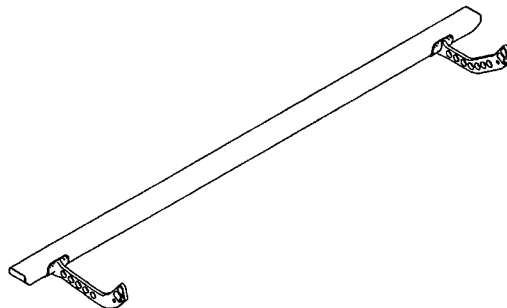
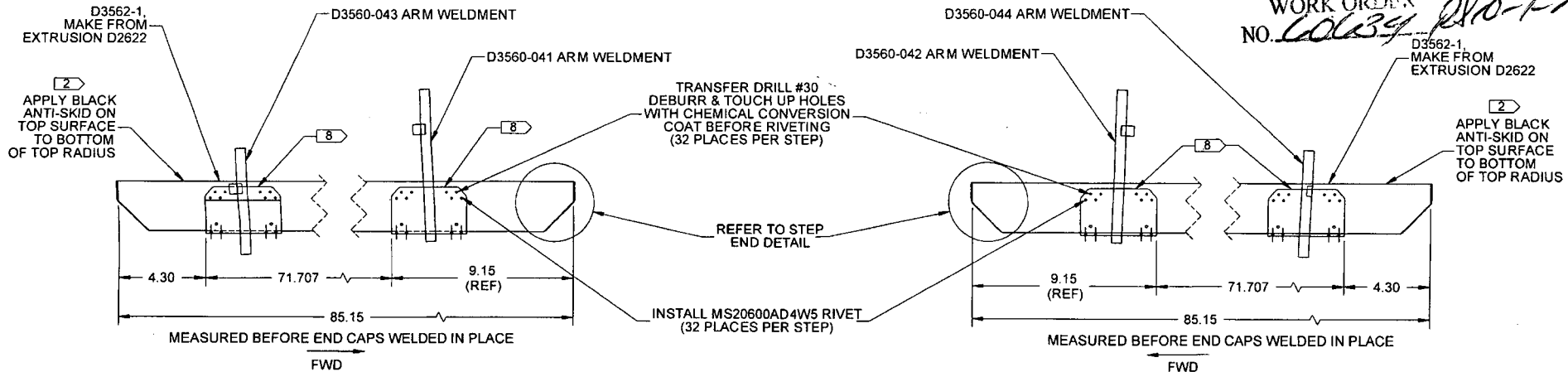
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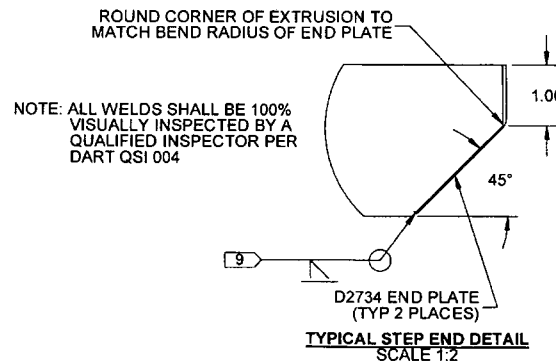
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT

WITHOUT NOTICE

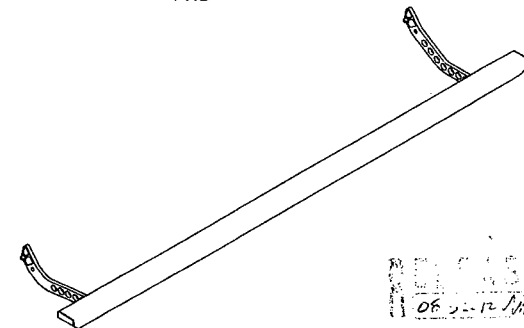
WORK ORDER
NO. *60639* *210-7*



D3562-041 LH STEP ASSEMBLY



**TYPICAL STEP END DETAIL
SCALE 1:2**



D3562-042 RH STEP ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH:
 - i) CHEMICAL CONVERSION COAT STEP EXTRUSION PER DART QSI 005 4.1 BEFORE ASSEMBLY
 - ii) POWDER COAT ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDTEX (4.3.5.6) OR BLACK SANDTEX (4.3.5.7) OR GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3
 - iii) BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 8.79 lbs
- 8) INSTALL ARM WELDMENTS WITH A LAYER OF MAGNOBOND 6398 BETWEEN THE ARM WELDMENT AND STEP EXTRUSION. FILL ANY TOOLING HOLES WITH MAGNOBOND 6398. CLEAN OFF EXCESS BEFORE POWDER COATING.
- 9) WELDING: PER DART QSI 004

QTY -041	QTY -042	P/N	DESCRIPTION
X	X	D3562-041	LH STEP ASSEMBLY
		D3562-042	RH STEP ASSEMBLY
1		D3560-041	ARM WELDMENT
	1	D3560-042	ARM WELDMENT
1		D3560-043	ARM WELDMENT
	1	D3560-044	ARM WELDMENT
32	32	MS20600AD4W5	RIVET
2	2	D2734	END PLATE

E	ADD QTY (2) TO D2734 END PLATE ON D3562-042	PH	08.01.11
D	REMOVE D2808 SPACER NOTE; REDRAWN IN SOLIDWORKS	DC	07.11.16
C	NOW MAGNOBOND, ADD D2808, REMOVE 4 RIVETS	CP	07.06.19
B	ARMS NOW RIVETED TO STEP	CP	07.01.15
A	NEW ISSUE	CP	06.09.26
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>gp</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>sk</i>		
CHECKED	<i>le</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>mp</i>	D3562	SHEET 1 OF 1
APPROVED	<i>mp</i>	TITLE	SCALE
DE APPR.	<i>mp</i>	STEP ASSEMBLY	1:5
DATE	08.01.11	COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

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